

**ABSTRACT**

A method and system for optimizing the use of a plurality of processors when compiling a program in a computer system is disclosed. The method and system comprises providing a list of directories and a list of processors. The method and system further includes determining when a directory is available. The method and system includes assigning a directory to a next available processor in an ordered manner to allow the next available processor to compile at least one file within the directory. Finally, the method and system includes ensuring that the maximum number of directories can be processed by assigning a processor thereto. Through the use of the method and system in accordance with the present invention, compile cycle time for large programs is significantly reduced. Accordingly, the dependencies are updated simultaneously with the code changes, thereby allowing for the compiling of the large program with minimal dependency violations.